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Klaus Hunlich

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EXAMINER

MEW, KEVIN D

ART UNIT

PAPER NUMBER

2664

9

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/720,961

Applicant(s)

HUNLICH, KLAUS

Examiner

Kevin Mew

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 20-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-24, 26-27, 29-35, 37 is/are rejected.
- 7) ☒ Claim(s) 25, 28, 36 and 38 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3 and 7.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Detailed Action***

***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on 7/3/1998. It is noted, however, that applicant has not filed a certified copy of the 19829821.8 application as required by 35 U.S.C. 119(b).
2. Acknowledgment is made of applicant's claim for priority under 35 U.S.C. 119(a)-(d) based upon an application filed in Germany on 7/3/1998. A claim for priority under 35 U.S.C. 119(a)-(d) cannot be based on said application, since the United States application was filed more than twelve months thereafter.

***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description:

Reference characters NK1, NK2, NK3 in Fig. 1.

Reference characters L3-NK, L2-NK, L3-Z-KE, L3-U-KE, L3-UNK, L3-ZNK, L3-NK3 in Fig. 2.

A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Objections***

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4. Claims 22, 26 are objected to because of the following informalities: the term “network” is separated as two words “net” and “work” in lines 16 of claim 22 and line 2 of claim 26. Appropriate correction is required to eliminate the space in between the words “net” and “work”.
5. Claim 27 is objected to because of the following informalities: the term “message” in “a plurality of connection setup message” should be plural in line 2 of the claim. Appropriate correction is required to append a “s” to the term “message” in line 2.
6. Claim 32 is objected to because of the following informalities: the term “message” in line 5 of the claim should be in plural form. Appropriate correction is required to append a “s” to the term “message” in line 5.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. **Claims 20-24, 26-27, 29-35, 37** are rejected under 35 U.S.C. 102(b) as being anticipated by Shobatake (USP 5,506,847).

Regarding claim 20, Shobatake discloses a method for establishing a route (**set up a VP/VC link**) via a connection-oriented communication network with a plurality of network nodes (see nodes 3, 14, 15, Fig. 10) connected to one another for emulating

connectionless services (**ATM-LAN system**, see lines 46-47, col. 7 and Fig. 1),  
comprising the steps of:

communicating a connection setup message including a destination address and a source address (**connection setting request message comprises destination address and source address**, see Table 7, col. 30) to a network node (**the connection setting process sends node setting request message to the respective nodes successively**, see lines 8-10, col. 18 and Fig. 10), said connection set up message proceeding from a source communication terminal device (**connection setting process originates from a sending terminal to a receiving terminal with a plurality of nodes on the line**, see lines 6-17, col. 18);

entering a network address into the connection set up message via said network node said network address being allocated to the network node in the communication network (**a node number, which is globally unique, is assigned to each node and is being transmitted by each node setting process to the connection setting process**, see lines 53-55, col. 8 and lines 44-56, col. 10);

forwarding the connection set up message via the network node that receives the connection set up message to at least one neighboring network node (each node acquires the node numbers of the neighborhood nodes by generating a request message, see lines 44-49, col. 10);

forwarding the connection set up message to a destination communication terminal device upon reception of the connection set up message at a destination node (**the setting and coupling of the VP/VC link is completed at all nodes the path between the sending terminal and the receiving terminal and the connection setting**

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**process prepares a connection arriving message representing arriving of connection and sends it to the terminal setting process**, see lines 48-53, col. 18 and callee terminal, Fig. 10), said destination node being identifiable with an assistance of the destination address (**see destination address of the connection arriving message that identifies the destination node**, Table 9); and

returning a confirmation message to the source communication terminal device on said route (**connection acknowledge message is received at the sending terminal via the connection setting process 10321**, see lines 50-66, col. 18 and see caller terminal, Fig. 10), said route being defined by the source address (**source address**, see Table 10), said route also being defined by the network node address (**node number of the neighboring nodes**, see lines 44-56, col. 10), a switching information for messages to be subsequently transmitted between the source communication terminal and the destination communication terminal device being deposited in network nodes that are traversed (**the connection setting process 10321 sends node setting request messages to the respective nodes successively on the line between the sending terminal and the receiving terminal**, see lines 6-16, col. 18 and Fig. 10).

Regarding claim 21, Shobatake discloses a method for establishing a route (**set up a VP/VC link**) via a connection-oriented communication network with a plurality of network nodes (see nodes 3, 14, 15, Fig. 10) connected to one another for emulating connectionless services (**ATM-LAN system**, see lines 46-47, col. 7 and Fig. 1), comprising the steps of:

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communicating a connection setup message including a destination address and a source address (**connection setting request message comprises destination address and source address**, see Table 7, col. 30) to a network node (**the connection setting process sends node setting request message to the respective nodes successively**, see lines 8-10, col. 18 and Fig. 10), said connection set up message proceeding from a source communication terminal device (**connection setting process originates from a sending terminal to a receiving terminal with a plurality of nodes on the line**, see lines 6-17, col. 18);

entering a network address into the connection set up message via said network node said network address being allocated to the network node in the communication network (**a node number, which is globally unique, is assigned to each node and is being transmitted by each node setting process to the connection setting process**, see lines 53-55, col. 8 and lines 44-56, col. 10);

forwarding the connection set up message via the network node that receives the connection set up message to at least one neighboring network node (**each node acquires the node numbers of the neighborhood nodes by generating a request message**, see lines 44-49, col. 10); and

returning a confirmation message to the source communication terminal device on said route (**connection acknowledge message is received at the sending terminal via the connection setting process 10321**, see lines 50-66, col. 18 and see caller terminal, Fig. 10), said route being defined by the source address (**source address**, see Table 10), said route also being defined by the network node address (**node number of the neighboring nodes**, see lines 44-56, col. 10), a switching information for messages to be

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subsequently transmitted between the source communication terminal and the destination communication terminal device being deposited in network nodes that are traversed (**the connection setting process 10321 sends node setting request messages to the respective nodes successively on the line between the sending terminal and the receiving terminal**, see lines 6-16, col. 18 and Fig. 10).

Regarding claim 22, Shobatake discloses a method for establishing a route (**set up a VP/VC link**) via a connection-oriented communication network with a plurality of network nodes (see nodes 3, 14, 15, Fig. 10) connected to one another for emulating connectionless services (**ATM-LAN system**, see lines 46-47, col. 7 and Fig. 1), comprising the steps of:

communicating a connection setup message including a destination address and a source address (**connection setting request message comprises destination address and source address**, see Table 7, col. 30) to a network node (**the connection setting process sends node setting request message to the respective nodes successively**, see lines 8-10, col. 18 and Fig. 10), said connection set up message proceeding from a source communication terminal device (**connection setting process originates from a sending terminal to a receiving terminal with a plurality of nodes on the line**, see lines 6-17, col. 18);

entering a network address into the connection set up message via said network node said network address being allocated to the network node in the communication network (**a node number, which is globally unique, is assigned to each node and is**



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being transmitted by each node setting process to the connection setting process, see lines 53-55, col. 8 and lines 44-56, col. 10);

forwarding the connection set up message via the network node that receives the connection set up message to at least one neighboring network node (**each node acquires the node numbers of the neighborhood nodes by generating a request message**, see lines 44-49, col. 10);

forwarding the connection set up message to a destination communication terminal device upon reception of the connection set up message at a destination node (**the setting and coupling of the VP/VC link is completed at all nodes the path between the sending terminal and the receiving terminal and the connection setting process prepares a connection arriving message representing arriving of connection and sends it to the terminal setting process**, see lines 48-53, col. 18 and callee terminal, Fig. 10), said destination node being identifiable with an assistance of the destination address (**destination address of the connection arriving message that identifies the destination node**, see Table 9); and

returning a confirmation message to a source network node on said route (**connection acknowledge message is received at the sending terminal via the connection setting process 10321**, see lines 50-66, col. 18 and see caller terminal, Fig. 10), said route being defined by the source address (**source address**, see Table 10), said route also being defined by the network node address (**node number of the neighboring nodes**, see lines 44-56, col. 10), a switching information for messages to be subsequently transmitted between the source communication terminal and the destination communication terminal device being deposited in network nodes that are traversed (**the**

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**connection setting process 10321 sends node setting request messages to the respective nodes successively on the line between the sending terminal and the receiving terminal, see lines 6-16, col. 18 and Fig. 10).**

Regarding claim 23, Shobatake discloses a method for establishing a route (**set up a VP/VC link**) via a connection-oriented communication network with a plurality of network nodes (see nodes 3, 14, 15, Fig. 10) connected to one another for emulating connectionless services (**ATM-LAN system**, see lines 46-47, col. 7 and Fig. 1), comprising the steps of:

communicating a connection setup message including a destination address and a source address (**connection setting request message comprises destination address and source address**, see Table 7, col. 30) to a network node (**the connection setting process sends node setting request message to the respective nodes successively**, see lines 8-10, col. 18 and Fig. 10), said connection set up message proceeding from a source communication terminal device (**connection setting process originates from a sending terminal to a receiving terminal with a plurality of nodes on the line**, see lines 6-17, col. 18);

entering a network address into the connection set up message via said network node said network address being allocated to the network node in the communication network (**a node number, which is globally unique, is assigned to each node and is being transmitted by each node setting process to the connection setting process**, see lines 53-55, col. 8 and lines 44-56, col. 10);

forwarding the connection set up message via the network node that receives the connection set up message to at least one neighboring network node (**each node acquires the node numbers of the neighborhood nodes by generating a request message**, see lines 44-49, col. 10); and

returning a confirmation message to a source network node on said route (**connection acknowledge message is received at the sending terminal via the connection setting process 10321**, see lines 50-66, col. 18 and see caller terminal, Fig. 10), said route being defined by the source address (**source address**, see Table 10), said route also being defined by the network node address (**node number of the neighboring nodes**, see lines 44-56, col. 10), a switching information for messages to be subsequently transmitted between the source communication terminal and the destination communication terminal device being deposited in network nodes that are traversed (**the connection setting process 10321 sends node setting request messages to the respective nodes successively on the line between the sending terminal and the receiving terminal**, see lines 6-16, col. 18 and Fig. 10).

Regarding claim 24, Shobatake discloses a method according to claim 20, further comprising the step of:

communicating the connection setup message to a source network node (**connection setting process to source**, see elements 10321 and source node 14, Fig. 10), said source communication terminal device being connected to the communication network via said source network node (see source node 14 and caller terminal, Fig. 10).

Regarding claim 26, Shobatake discloses a method according to claim 20, wherein said network node receiving the connection setup message forwards the connection setup message to network nodes being connected to the network node receiving the connection only when a plurality of network nodes traversed by a received connection setup message is lower than an adjustable limit value.

Regarding claim 27, Shobatake discloses a method according to claim 20, wherein in instances where a plurality of connection setup message are received at the destination communication terminal device, further comprising a steps of:

selecting one of received connection setup messages based on a predetermined criteria (**a connection can be set to a mobile terminal based on the transmission bandwidth preferred to a mobile terminal, see the message content of the connection arriving message that comprises the connection request bandwidth, see lines 26-34, col. 63 and Table 9**); and

returning said confirmation message only for a setup message selected based on said selecting step (**message content of the connection acknowledgement message corresponding to connection arriving message, which comprises the connection request bandwidth, see Table 10**).

Regarding claim 29, Shobatake discloses a method according to claim 27, wherein said predetermined criteria is based on the plurality of the network nodes traversed on said route (see lines 14-17, col. 8), said route being defined by the connection setup message.

Regarding claim 30, Shobatake discloses a method according to claim 27, wherein said predetermined criteria is based on costs incurred on said route (**transmission delay**, see lines 18-22, col. 63), said route being defined by the connection setup message.

Regarding claim 31, Shobatake discloses a method according to claim 27, wherein said predetermined criteria depends on a transmission capacity made available (**bandwidth**, see lines 18-22, col. 63) on said route, said route being defined by the connection setup message.

Regarding claim 32, Shobatake discloses a method according claim 20, wherein a transmission of at least one of the connection setup message and the confirmation message between neighboring network nodes ensues via a specific connection provided exclusively for transmission of at least one of the connection setup and the confirmation message (**Virtual Path (VP)**, see lines 48-53, col. 18).

Regarding claim 33, Shobatake discloses a method according to claim 32, wherein at least one channel of a connecting line between two neighboring network nodes is reserved for said specific connection (**Virtual Channel (VC)**, see lines 48-53, col. 18).

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Regarding claim 34, Shobatake discloses a method according to claim 20, wherein an ith network node receiving the connection setup message enters the network node address (**node number**, see Table 1) being allocated to said ith network node in the communication network into an address field of an ith address pair field (**source address field and destination address field**, see Table 1) of the connection setup message (**neighborhood node number request message**, see Table 1).

Regarding claim 35, Shobatake discloses a method according to claim 34, wherein the network node address is the layer-3 address of the network node (see lines 48-53, col. 78) according to Open Systems Interconnection reference model.

Regarding claim 37, Shobatake discloses a method according to claim 20, wherein for a bidirectional message communication between the source communication terminal device and the destination communication terminal device the switching information being deposited sets which input of the network node is linked to which output of the network node (**setting VP/VC link pair having an opposite direction to each other**, see lines 61-67, col. 37 and lines 1-10, col. 38).

*Allowable Subject Matter*

8. Claims 25, 28, 36, 38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

In claim 25, a method according to claim 20, wherein the network node receiving the connection setup message forwards the connection setup message only to a first network node, said first network node connected to the network node receiving the connection setup message, network node address of the first network node not being entered in the received connection setup message.

In claim 28, a method according to claim 27, wherein only connection setup messages that arrive within a predetermined time span after reception of a first connection setup message at the destination communication terminal device are considered for said selecting step.

In claim 36, a method according to claim 34 wherein the ith network node receiving the confirmation message enters a layer-2 address into a further address field of the ith address pair field of the confirmation message, said layer-2 address being allocated to said ith network node communication network according to the Open Systems Interconnection reference model.

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In claim 38, a method according to claim 37, wherein the switching information is deleted after a predetermined time span in which no messages were transmitted between the source communication terminal device and the destination communication terminal device.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure with respect to method for establishing a route via a communication network.

US Patent 5,790,546 to Dobbins

US Patent 5,996,021 to Civanlar et al.

US Patent 6,115,372 to Dinha

US Patent 5,835,710 to Nagami et al.



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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Mew whose telephone number is 703-305-5300.

The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KDM  
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